FIG. 1

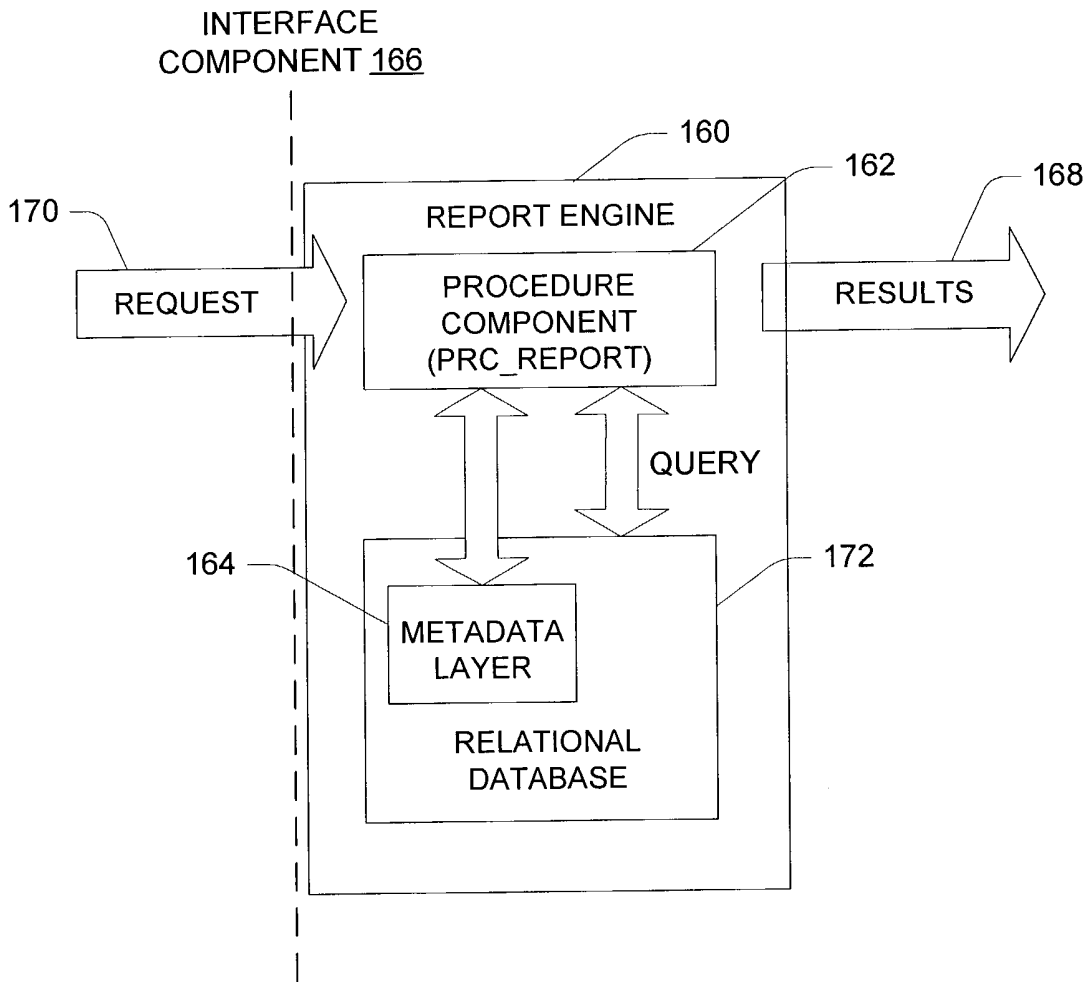

INTERFACE
COMPONENT 166
160
162
168
170
REPORT ENGINE
REQUEST
PROCEDURE
COMPONENT
(PRC_REPORT)
RESULTS
QUERY
164
172
METADATA
LAYER
RELATIONAL
DATABASE

FIG. 2

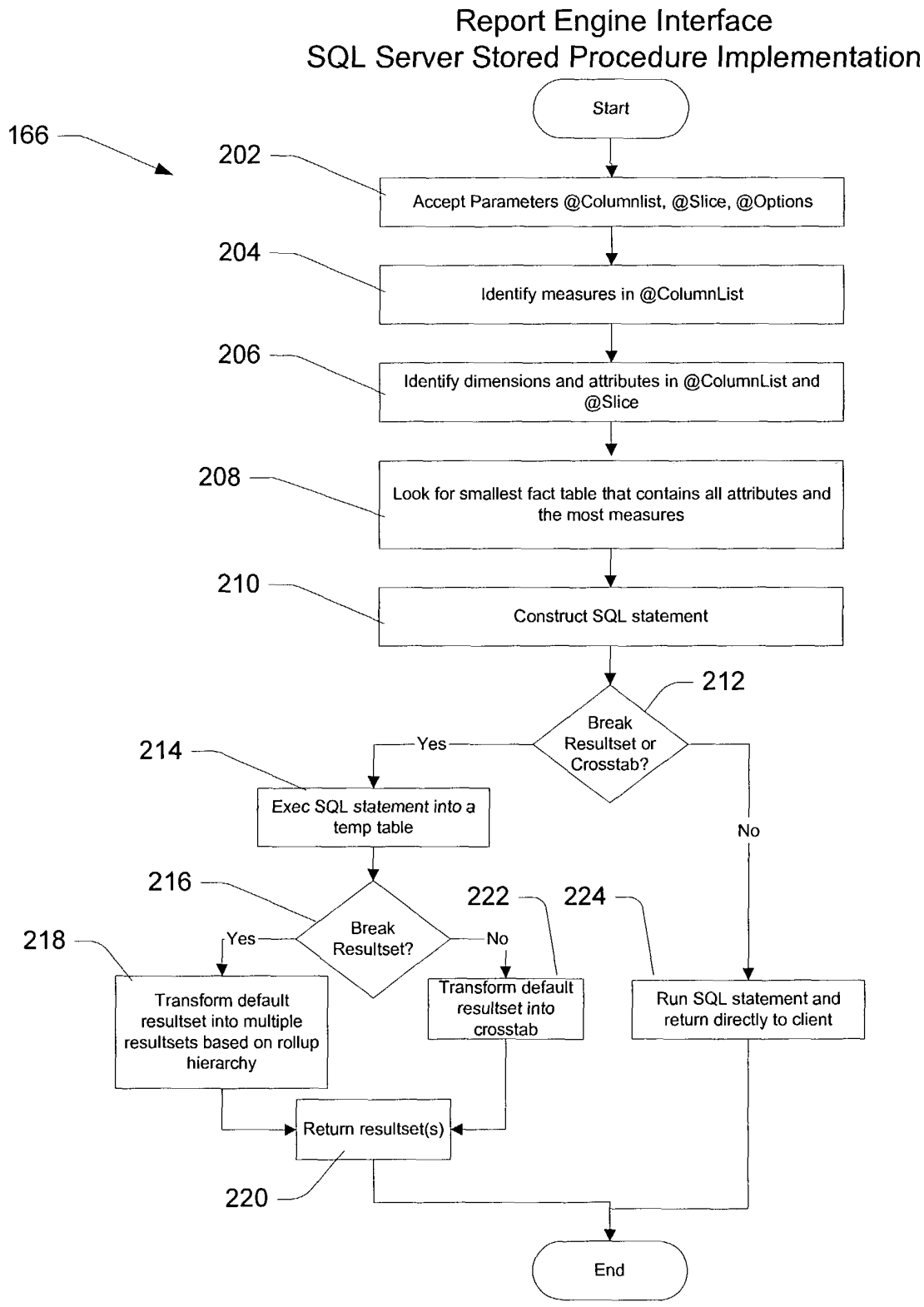

Report Engine Interface
SQL Server Stored Procedure Implementation
166
Start
202
Accept Parameters @Columnlist, @Slice, @Options
204
Identify measures in @ColumnList
206
Identify dimensions and attributes in @ColumnList and @Slice
208
Look for smallest fact table that contains all attributes and the most measures
210
Construct SQL statement
212
Break Resultset or Crosstab?
Yes
No
214
Exec SQL statement into a temp table
216
Break Resultset?
Yes
No
218
Transform default resultset into multiple resultsets based on rollup hierarchy
222
Transform default resultset into crosstab
224
Run SQL statement and return directly to client
Return resultset(s)
220
End

FIG. 3

Report Engine Metadata

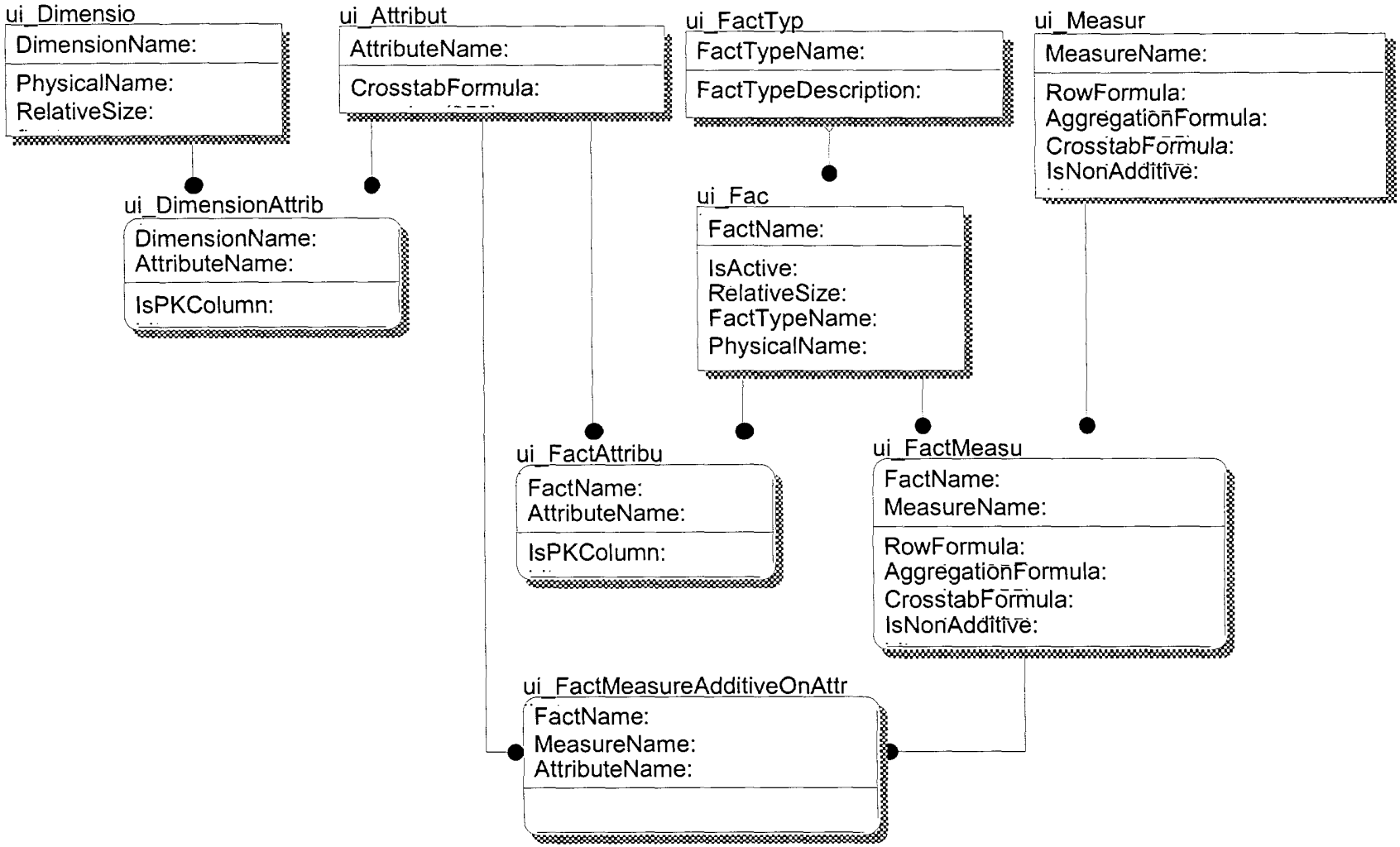
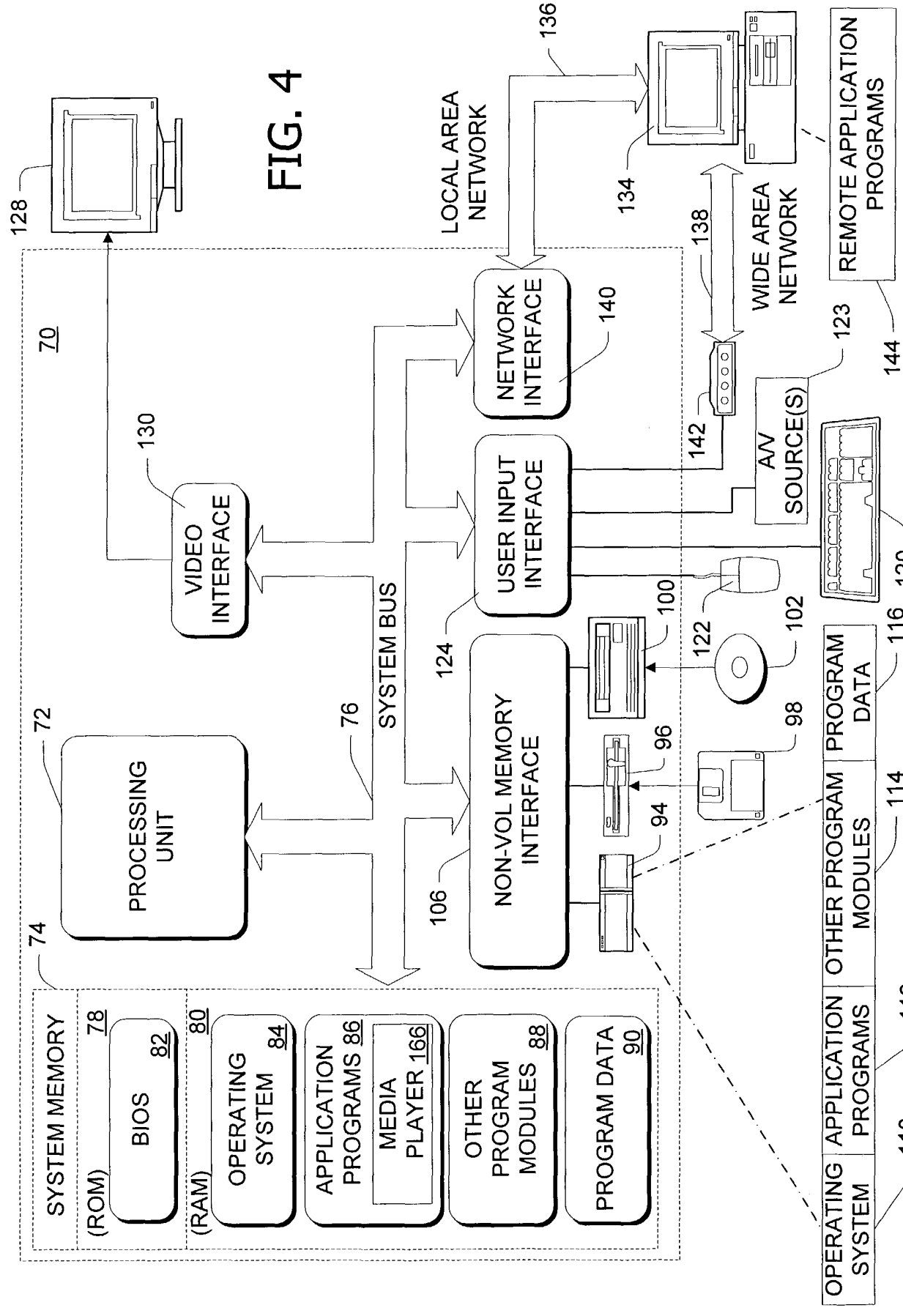


FIG. 4


70
74
SYSTEM MEMORY
(ROM) 78
BIOS 82
(RAM) 80
OPERATING SYSTEM 84
APPLICATION PROGRAMS 86
MEDIA PLAYER 166
OTHER PROGRAM MODULES 88
PROGRAM DATA 90
PROCESSING UNIT 72
76
SYSTEM BUS
VIDEO INTERFACE 130
NETWORK INTERFACE 140
USER INPUT INTERFACE 124
NON-VOL MEMORY INTERFACE 106
128
LOCAL AREA NETWORK
136
134
138
WIDE AREA NETWORK
142
A/V SOURCE(S) 123
REMOTE APPLICATION PROGRAMS 144
100
102
120
122
96
98
94
OPERATING SYSTEM 110
APPLICATION PROGRAMS 112
OTHER PROGRAM MODULES 114
PROGRAM DATA 116